Attachment 1

COMMENTS OF TMDL COALITION ON
BAN ON MIXING ZONES FOR LISTED POLLUTANTS

EPA should clearly provide that States may allow mixing zones in listed waters, and may consider mixing factors in permitting analyses, as long as the State's water quality management program will result in progress toward attainment of water quality standards.

The proposed TMDL rules do not explicitly address permitting issues for existing sources before a TMDL is developed. In particular, the Agency has not stated whether mixing zones would be allowed for these sources. However, in another recent Federal Register notice, concerning the reproposal of a ban on mixing zones for bioaccumulative chemicals of concern in the Great Lakes Basin (63 Fed. Reg. 53632, October 4, 1999), EPA states that mixing zones cannot be granted for discharges of listed pollutants to impaired waters. Also, we are aware that at least one EPA Region has taken the same position, objecting to a State-issued permit because it allowed mixing zones and considered mixing factors in a "reasonable potential" permitting analysis. We believe that those Agency positions are incorrect; they are contrary to Congressional intent, and they are not authorized by current Federal regulations or policies. Moreover, they would impose substantial additional control costs without resulting in significant environmental benefit. Therefore, we believe that EPA should retract its statements on this issue and clearly provide that States may allow mixing zones in impaired waters, and may consider mixing factors in "reasonable potential" analyses, as long as the State can demonstrate that its overall approach to managing water quality in the waterbody will result in progress toward attainment of water quality standards.

I. Congress Did Not Intend to Eliminate Mixing Zones for Listed Pollutants.

The CWA does not contain, expressly or impliedly, a Congressional intent to eliminate mixing zones for listed pollutants. In its recent statements on this issue, EPA has relied on Section 301(b)(1)(C)[1] of the Act as statutory authority to conclude that mixing zones must be eliminated for impaired waters. However, a review of that section's legislative history provides no indication that Congress meant to give EPA the authority to eliminate mixing zones.

It is important to remember that in passing the Act in 1972, Congress did not intend to make water quality standards, and use of those standards to control effluents, into a major driving force in improving water quality. Indeed, the Act signified a move away from that type of regulatory approach:

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[1]EPA's statements have expressly cited a regulatory provision, 40 C.F.R. § 122.44(d)(1). However, EPA relied on Section 301(b)(1)(C) to promulgate that rule. *See*, *e.g.,* 54 Fed. Reg. 23868, 23873 (June 2, 1989).

> The legislation recommended by the Committee proposes a major change in the enforcement mechanism of the Federal water pollution control program from water quality standards to effluent limits....Under the 1965 Act, water quality standards were to be set as the control mechanism....The water quality standards program is limited in its success....Under this Act the basis of pollution prevention and elimination will be the application of effluent limitations. Water quality will be a measure of program effectiveness and performance, not a means of elimination and enforcement.

S. REP. NO. 92-414, p. 3710, 92nd Cong., 2nd Sess. (1972) (emphasis added).

While § 301(b)(1)(C) was included in the statute, Congress envisioned this provision playing a carefully limited role: "Where the Administrator can identify a direct link between a discharge source and water quality, the Administrator is authorized to tighten controls on the polluter." Id. at 3676. In explaining the function of this provision, Congress gave absolutely no indication that it meant to do away with the long-recognized practice of applying mixing zones:

> "Section 301(b)(1)(C) provides adequate authority to apply new information to existing water quality requirements and upgrade effluent limits accordingly....In other words, whenever the Administrator determines that application of the best practicable treatment technology requirements of Phase I will not provide for implementation of existing water quality standards for interstate or intrastate streams, he must tighten the requirements against a source of discharge or group of sources."

Id. at 3710. This generally phrased directive to "upgrade effluent limits accordingly" and to "tighten the requirements" is a far cry from a mandate to apply water quality standards at the end-of-pipe as effluent limits, which is the result of EPA's new "no mixing zone" policy. The legislative history simply provides no support for such a requirement.

II. EPA's Rules Do Not Authorize the Unilateral Elimination of Mixing Zones for Listed Pollutants.

A. States are Not Required to Disregard Mixing Zones in Calculating Effluent Limits.

EPA has taken the position that 40 C.F.R. §122.44(d)(1) *requires* elimination of mixing zones in calculating effluent limits for listed pollutants. That simply is not so. EPA's permitting rules simply provide that States may adopt mixing zone policies to implement their water quality standards and, as discussed in Section IV below, grant States broad discretion to establish permitting programs. The regulations do not restrict or prohibit the use of mixing zones for listed pollutants, and 40 C.F.R. § 122.44(d)(1) itself only requires that NPDES permits include conditions "necessary to . . . achieve water quality standards." In fact, regulations specifically addressing whether to include an effluent limit – including 40 C.F.R. § 122.44(d)(1) -- expressly contemplate mixing zones:

> "[w]hen determining whether a discharge causes, has the reasonable potential to cause or contributes to [an exceedance of water quality standards] . . . the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent . . . and where appropriate, the dilution of the effluent in the receiving water."

40 C.F.R. § 122.44(d)(1)(ii) (emphasis added). In promulgating this regulation, EPA recognized the existing practice of using mixing zones:

> "To determine whether a discharge causes, has the reasonable potential to cause, or contributes to an excursion above a water quality criterion, and thus requires a water quality-based effluent limit, the permitting authority must use reliable and consistent procedures. Although the procedures vary considerably from one state to another, most such procedures account for any dilution of the effluent in the receiving water, after considering mixing zones if applicable**,** any contributions of the pollutant from upstream and nonpoint sources, the variability of the pollutant in the effluent, and, when evaluating whole effluent toxicity, the sensitivity of the test species in a toxicity test."

54 Fed. Reg. 23868, 23872 (June 2, 1989) (emphasis added).

Moreover, EPA previously has refused to prohibit states from applying mixing zones as a means of achieving water quality standards. When it issued Section 122.44(d)(1) - the rule at issue in this permit proceeding - EPA received comments requesting that mixing zones be prohibited. EPA rejected those comments, stating as follows:

> "EPA believes, however, that it is inappropriate to prohibit mixing zones in this regulation. The use of mixing zones raises issues that are more appropriately addressed in the state water quality standards adoption process. Therefore, EPA is not deleting the reference to mixing zones in paragraph (d)(1)(ii)."

54 Fed. Reg. 23868, 23872 (June 2, 1989)(emphasis added). EPA cannot now do, by fiat in the preamble of a Federal Register notice or in comments on a State permit, what it has previously refused to do in its rules: prohibit mixing zones.

B. States are Not Required to Disallow Mixing Zones in Calculating Reasonable Potential.

In addition to claiming that mixing zones are not allowed for listed pollutants, EPA has also asserted that mixing factors cannot be considered in developing a "reasonable potential" analysis. As quoted above, 40 C.F.R. § 122.44(d)(1)(ii) squarely contradicts this assertion and, where appropriate, expressly allows for dilution of the effluent in the receiving water. Moreover, EPA specifically considered whether to allow mixing zones to calculate reasonable potential for impaired waters and concluded that the use of mixing zones should continue:

> "EPA intended the proposed rules to apply to any point source that is discharging a pollutant at a level that is exceeding or may exceed a waste load allocation for that discharge . . . The process for identifying water-quality limited segments requiring total maximum daily loads (TMDLs) and wasteload allocations (WLAs) is set forth in EPA's regulations at 40 C.F.R. § 130.7. . . . This clarification makes no substantive change to today's regulations, but merely clarifies that today's amendments to [40 C.F.R. § 122.44(d)(1), including procedures to account for dilution in receiving waters] are consistent with EPA's existing approach for establishing water quality-based effluent limits."

54 Fed. Reg.23868, 23873 (June 2, 1989)(emphasis added). As discussed immediately below, EPA's "existing approach" is found in the Technical Support Document for Water Quality-Based Toxics Control (1991) ("TSD"), and incorporates mixing factors directly into the wasteload allocation analysis.

III. Long-Standing EPA Policies Contradict Elimination of Mixing Zones for Listed Pollutants.

Guidance issued by EPA, which has been in place for almost 10 years, expressly provides for the incorporation of mixing zones in developing a wasteload allocation for point source dischargers. EPA's TSD provides:

> "The establishment of a TMDL for a particular water body is dependent on the location of point sources, available dilution, water quality standards, nonpoint source contributions, background concentrations, and instream pollutant reactions and effluent toxicity. All of these factors can affect the allowable mass of the pollutant in the water body."

TSD at p. 67 (emphasis added). The establishment of a TMDL presupposes that the waterbody has been listed for a particular parameter. Consequently, EPA's policy existing in 1991 clearly allowed for states to consider mixing zones in calculating wasteload allocations for impaired waterbodies.

Further, the TSD recognizes that a state regulatory agency may decide to deny a mixing zone in a site-specific case. EPA identifies several examples where denial of a mixing zone may be appropriate in a particular instance. However, the elimination of mixing zones for listed pollutants is conspicuously absent from these examples. *Id*. at p. 71.

IV. A Ban on Mixing Zones for Listed Pollutants Would Conflict with Federal Clean Water Act Policies.

A. *A Federally-Imposed Mixing Zone Ban Would be Inconsistent with the States' Broad Discretion to Implement Water Quality Standards.*

As addressed briefly above, EPA's attempt to impose a ban on mixing zones for listed pollutants is inconsistent with the States' broad discretion to implement water quality standards. Section 101 of the Act provides:

> "It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter."

33 U.S.C. § 1251. Consistent with this directive, EPA's own rules grant the States authority to adopt mixing zone policies to implement water quality standards but never restrict or otherwise prohibit mixing zones for impaired waterbodies. In fact, the EPA Administrator has specifically recognized that States have broad discretion in this area:

> "[W]hether limited forms of relief such as variances, mixing zones, and compliance schedules should be granted are purely matters of state law, which EPA has no authority to override."

In the Matter of Star-Kist Caribe, Inc., NPDES Appeal No. 88-5 (1990) at 15-6. EPA's own regulations confirm this position: when EPA establishes Federal water quality standards for a State, its rules specifically provide that "[f]or all waters with mixing zone regulations or implementation procedures, the criteria apply at the appropriate locations within or at the boundary of the mixing zones . . .." 40 C.F.R. § 131.36(c)(2)(I).

Historically, NPDES permitting practices have considered the physical mixing of effluents with ambient receiving streams. By including mixing zones in permitting decisions, State agencies have recognized the fact that an effluent discharge may increase pollutant levels in the immediate vicinity of an outfall without having any significant impact on pollutant levels in the waterbody as a whole or on achieving a waterbody's designated use(s). Flexible mixing zone policies have allowed State agencies broad discretion in issuing permit limits and, where limits have been required, in calculating the appropriate numeric limit. Accordingly, public and private resources have been focused on situations where additional control requirements will, in fact, improve water quality.

EPA's mandatory removal of mixing zones would prohibit States from deciding the most practical and environmentally sound results. More permit limits would be issued than under current practices, and the limits would require dischargers to meet water quality criteria at the end of the pipe. Compliance with water quality standards at the outfall would result in enormous additional compliance costs for redundant or unnecessary treatment systems. In turn, this will likely result in lost jobs, increased sewer charges and taxes, and stunting of economic growth. At the same time, the environmental benefits – *i.e.*, improved water quality – would be minimal.

B. A Federally-Imposed Mixing Zone Ban Would be Inconsistent with EPA's own CWA Policies.

In implementing the CWA's principles, EPA has adopted a number of policies that recognize practical constraints on attainment of water quality standards, and which provide States with tools that they can use to achieve those standards in an efficient and economically reasonable manner. Two such policies are those that deal with compliance schedules and "phased" TMDLs. EPA's asserted ban on mixing zones for listed pollutants is fundamentally inconsistent with the reasonable, practical concepts that are embodied in those other EPA policies. Those conflicts are explained further below.

1. Compliance Schedule Policies

EPA's existing policies on the issuance of compliance schedules illustrate the flexibility that the States have under the CWA in establishing requirements to attain water quality standards. EPA does not require that dischargers must meet water quality standards immediately upon issuance of an NPDES permit. Rather, States may issue compliance schedules, which allow dischargers to meet interim targets over a period of years while continuing to make progress toward final compliance. EPA does not specify or require a maximum Federally-allowed compliance schedule. Even for the Great Lakes Initiative rulemaking, where EPA did specify a maximum compliance term (five years), EPA specifically rejected commenters' suggestion to demand immediate compliance. *See* Water Quality Guidance for the Great Lakes System - Supplementary Information Document ("SID"), at 434. Therefore, regarding compliance schedules, EPA has not mandated a strict policy that would deny States' discretion to determine when dischargers must meet applicable effluent limits. Instead, EPA has recognized that practical factors must be considered, including the time and resources needed to identify, design and implement complex wastewater treatment systems. EPA cannot deny States the same discretion and flexibility in establishing mixing zone policies for listed waters.

2. Phased TMDL Policies

The "phased TMDL" concept is another example of the flexibility that is authorized, and which EPA has allowed, under the Act. The "phased TMDL" has particular relevance to EPA's asserted ban on mixing zones in listed waters, since the TMDL program applies specifically to listed waters. As discussed in our comments on "Phased TMDLs," the "phased TMDL" concept is specifically intended to address complex water quality problems, such as those involving contaminated sediments, where it may not be feasible to reach compliance with water quality standards easily or quickly. In many of these cases, there are existing point sources that are minor contributors of loadings, while the primary sources will need to be addressed on a long-term basis. Without flexibility for the State to consider long-term reductions in making near-term permitting decisions, existing dischargers could receive very stringent limits even though future reductions from other sources, of far greater impact, would be sufficient to bring the waterbody into compliance. EPA has recognized that severely restricting NPDES permittees in this manner would be unfair and likely unnecessary. Thus, EPA developed the "phased TMDL" as part of its guidance implementing the Great Lakes Initiative.

The Great Lakes SID explains the concept behind "phased TMDLs": "TMDLs developed using the phased approach are based on the reasonable expectation that water quality standards will be met in a reasonable period of time and that specific controls may be implemented in

stages." SID at p. 257. Thus, States do not have to require a particular facility to achieve immediate compliance with water quality standards. Rather, States can estimate the loadings for that NPDES source that will, *along with reductions from other sources*, bring about compliance within a "reasonable period of time." States have substantial discretion in implementing the "reasonable period of time" test:

> What constitutes a reasonable period of time will vary depending upon the situation. Therefore, EPA will not specify any particular period, such as eight years. The time period associated with these stages of implementation will ultimately determine when water quality standards will be met for a particular waterbody.

SID at p. 257.

The flexibility and discretion granted to States through EPA's own "phased TMDL" concept directly contradicts the Agency's recent statements requiring elimination of mixing zones for listed pollutants. EPA contends that States lack discretion to consider a mixing zone in establishing effluent limits. Under that approach, States must issue each source onerous effluent limits equal to the water quality criteria and applied at the outfall. States could not consider any other factors – including the lack of impacts on the waterbody as a whole or on the waterbody's designated uses, or the existence of expected reductions from other sources that will help the waterbody reach attainment. This strict, inflexible mandate clearly contradicts EPA's flexible "phased TMDL" approach, which also applies to listed waterbodies but which allows States flexibility and discretion to apply control requirements in stages over a "reasonable period" of time."

The "phased TMDL" approach, like the established EPA policies discussed above relating to compliance schedules and mixing zones, is statutorily authorized, reasonable and appropriate. EPA's asserted ban on mixing zones for listed pollutants, on the other hand, is inconsistent with the statute and with EPA's own rules and policies, and will impose enormous costs for little environmental benefit. That position should be withdrawn by EPA, and the Agency should clearly state that States may allow mixing zones in listed waters, and may allow mixing factors to be considered in "reasonable potential" permitting analyses for those waters, as long as the State shows that its overall water quality management approach will result in progress toward attainment of its water quality standards.